**BIOL 1411 Instructor Course Information Sheet**

**General Botany – Spring 2023**

*Instructor Information:*

 Mark Lee, M.S.

 mlee@southplainscollege.edu

 Office Hours:

 MW 1:00 PM – 3:45 PM

 F 9:30 AM – 12:15 PM

 OR by appointment

 Office: Science Room 79

*Course Information*

**Course Description:** Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi.

**Course Learning Outcomes:**

* *Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data (lab).*
* *Use critical thinking and scientific problem-solving to make informed decisions in the laboratory (lab).*
* *Communicate effectively the results of scientific investigations (lab).*
* Compare and contrast the structures, reproduction, and characteristics of plants, algae, and fungi.
* Describe the characteristics of life and the basic properties of substances needed for life.
* Identify the principles of inheritance and solve classical genetic problems.
* Describe phylogenetic relationships and classification schemes.
* Identify the major phyla of life with an emphasis on plants, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
* Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
* Identify the substrates, products, and important chemical pathways in photosynthesis and respiration.
* Describe the unity and diversity of plants and the evidence for evolution through natural selection.
* Compare different sexual and asexual life cycles noting their adaptive advantages.
* Describe the reasoning processes applied to scientific investigations and thinking.

**Format**: Conventional (face-to-face), Levelland Campus

**Textbook and Supplies:** No textbook required for this semester, although Stern’s Introductory Plant Biology (15th edition) is highly recommended. Students will not need to purchase supplies as these will be provided to them as needed. Access to blackboard is required.

**Evaluation:** Students will be assessed on the following criteria:

4 Exams (60%)

~15 Weekly Quizzes (15%)

~15 weekly assignments (25%)

All assignments not turned in by the deadline will result in an automatic zero.

**Attendance:** Students are expected to attend lectures and labs and are responsible for any material that they miss. Missing exam days will result in an automatic zero unless the student can provide definitive proof of extenuating circumstances.

**Lab Safety**: Students are required to wear closed toe shoes and long pants/dresses to lab. Food, drink, makeup and tobacco are not permitted in lab. Any violations of these policies will result in the student being sent away.

**Instructor Policies:** Food and drink are permitted in lecture, but the instructor reserves the right to revoke this privilege if it is abused. Phones are permitted in lecture and lab, but the instructor reserves the right to revoke this privilege if it is abused.

**Schedule**: The schedule for the course can be found on blackboard at any time, to include exam days and due dates for assignments. The instructor will inform the class of any changes made and update the schedule accordingly.

**For Policies and Procedures, see the common course syllabus.**